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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shunpei Yamazaki

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EXAMINER

BERCK, KENNETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/917,677

Applicant(s)

YAMAZAKI, SHUNPEI

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 17-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7 and 17, 19-25, 27-31, 33-39 and 41-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Koyama (US 6380007).

Regarding claim 1, Koyama discloses (fig 19) a light emitting device with an insulating film (42) over a substrate having a metallic surface, a light emitting element on the insulating film including an anode (47), cathode (43) and an EL material interposed between the anode and cathode (45, 46).

Regarding claim 2, Koyama discloses (fig 19) a light emitting device with an insulating film (42) over a substrate having a metallic surface, a light emitting element on the insulating film including an anode (47), cathode (43) and an EL material interposed between the anode and cathode (45, 46) and a light shielding film adjacent to the cathode (641, 642, 643, 520).

Regarding claim 3, Koyama discloses the substrate having the metallic surface is a heat resistive metallic substrate (stainless steel).

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Regarding claim 5, Koyama discloses (fig 19) a maximum surface roughness of the substrate is equal to or less than 1  $\mu\text{m}$  as shown from the smooth line on the substrate surface.

Regarding claim 6, Koyama discloses (fig 17) a radius of curvature of convex portions (7001 as compared to the 300 nm thick aluminum film formed on 4029) existing on a surface of the substrate is equal to or greater than 1  $\mu\text{m}$ .

Regarding claim 7, Koyama discloses (fig 23) the light emitting device is selected from a video camera.

Regarding claim 17, Koyama discloses the substrate having the metallic surface is a heat resistive metallic substrate (stainless steel).

Regarding claim 19, Koyama discloses (fig 19) a maximum surface roughness of the substrate is equal to or less than 1  $\mu\text{m}$  as shown from the smooth line on the substrate surface.

Regarding claim 20, Koyama discloses (fig 17) a radius of curvature of convex portions (7001 as compared to the 300 nm thick aluminum film formed on 4029) existing on a surface of the substrate is equal to or greater than 1  $\mu\text{m}$ .

Regarding claim 21, Koyama discloses (fig 23) the light emitting device is selected from a video camera.

Regarding claim 22, Koyama discloses (fig 18B) the light shielding film is formed in contact with the cathode.

Regarding claim 23, Koyama discloses (fig 13) the shielding film is formed adjacent to the cathode with an insulating or conductive film interposed between.

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Regarding claim 24, Koyama discloses (fig 19) a light emitting device with an insulating film (42) over a substrate having a metallic surface, a light emitting element on the insulating film including an anode (47), cathode (43) and an EL material interposed between the anode and cathode (45, 46).

Regarding claim 25, Koyama discloses the substrate having the metallic surface is a heat resistive metallic substrate (stainless steel).

Regarding claim 27, Koyama discloses (fig 19) a maximum surface roughness of the substrate is equal to or less than 1  $\mu\text{m}$  as shown from the smooth line on the substrate surface.

Regarding claim 28, Koyama discloses (fig 17) a radius of curvature of convex portions (7001 as compared to the 300 nm thick aluminum film formed on 4029) existing on a surface of the substrate is equal to or greater than 1  $\mu\text{m}$ .

Regarding claim 29, Koyama discloses (fig 23) the light emitting device is selected from a video camera.

Regarding claim 30, Koyama discloses (fig 19) a light emitting device with an insulating film (42) over a substrate having a metallic surface, a light emitting element on the insulating film including an anode (47), cathode (43) and an EL material interposed between the anode and cathode (45, 46) and a light shielding film adjacent to the cathode (641, 642, 643, 520).

Regarding claim 31, Koyama discloses the substrate having the metallic surface is a heat resistive metallic substrate (stainless steel).

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Regarding claim 33, Koyama discloses (fig 19) a maximum surface roughness of the substrate is equal to or less than 1  $\mu\text{m}$  as shown from the smooth line on the substrate surface.

Regarding claim 34, Koyama discloses (fig 17) a radius of curvature of convex portions (7001 as compared to the 300 nm thick aluminum film formed on 4029) existing on a surface of the substrate is equal to or greater than 1  $\mu\text{m}$ .

Regarding claim 35, Koyama discloses (fig 23) the light emitting device is selected from a video camera.

Regarding claim 36, Koyama discloses (fig 18B) the light shielding film is formed in contact with the cathode.

Regarding claim 37, Koyama discloses (fig 13) the shielding film is formed adjacent to the cathode with an insulating or conductive film interposed between.

Regarding claim 38, Koyama discloses (fig 17) a light emitting device with an insulating film (4021) over a substrate having a metallic surface, at least one thin film transistor over the first insulating film (4023), a second insulating film over the transistor (4026) a first electrode (4027), a light emitting layer (4029) a second electrode (4030).

Regarding claim 39, Koyama discloses the substrate having the metallic surface is a heat resistive metallic substrate (stainless steel).

Regarding claim 41, Koyama discloses (fig 19) a maximum surface roughness of the substrate is equal to or less than 1  $\mu\text{m}$  as shown from the smooth line on the substrate surface.

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Regarding claim 42, Koyama discloses (fig 17) a radius of curvature of convex portions (7001 as compared to the 300 nm thick aluminum film formed on 4029) existing on a surface of the substrate is equal to or greater than 1  $\mu\text{m}$ .

Regarding claim 43, Koyama discloses (fig 23) the light emitting device is selected from a video camera.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 18, 26, 32 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama (US 6380007) in view of Moriyama et al. (US 6447612).

Koyama discloses all of the above claim limitations but fails to clearly point out the thickness of the substrate in the range of 5 to 30  $\mu\text{m}$ .

Moriyama discloses (column 9, lines 34-43) the thickness of the substrate being in the range of 5 to 30  $\mu\text{m}$  in order to be as thin as possible and exhibit a desired strength.

Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the device of Koyama with the thickness of the substrate being in the range of 5 to 30  $\mu\text{m}$  in order to be as thin as possible and exhibit a desired strength, as taught by Moriyama.

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**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

*WJ*

kab

*Joseph Williams  
Joseph Williams*